

# STAT 405-01: Mathematical Statistics I

## Problem Set 8

Assigned 2015 October 27  
Due 2015 November 3

**Show your work on all problems!** Be sure to give credit to any collaborators, or outside sources used in solving the problems. Note that if using an outside source to do a calculation, you should use it as a reference for the method, and actually carry out the calculation yourself; it's not sufficient to quote the results of a calculation contained in an outside source.

- 1 Hogg 3.5.2**
- 2 Hogg 3.5.10**
- 3 Hogg 3.5.12**
- 4 Hogg 3.5.14**
- 5 Hogg 3.5.15**
- 6 Hogg 3.6.4**
- 7 Hogg 3.6.11**
- 8 Hogg 3.6.13**

[Also specify the parameters  $r_1$  and  $r_2$ .-JTW]